In the Claims:

Please amend the claims as follows:

1. (Currently Amended) A monitoring cable comprising:

a connector for connection to a monitoring equipment,

a cable including a plurality of individual wires each extending substantially an entire length of the cable, the cable having a first end to which the connector is attached and a distal end; and

a plurality of electrodes each electrically connected to a respective one of the plurality of individual wires and positioned at various points along the cable, each of the plurality of electrodes being electrically isolated from each of the other plurality of electrodes, at least one of the plurality of electrodes being positioned between the first end and the distal end.

2. (Original) A monitoring cable as recited in claim 1, wherein the plurality of individual wires each comprise single strands of wire.

3. (Original) A monitoring cable as recited in claim 1, wherein the plurality of individual wires each comprise multi-strand wires.

4. (Original) A monitoring cable as recited in claim 1, wherein the plurality of electrodes are integrally formed in the cable.

5. (Previously Amended) A monitoring cable as recited in claim 1, further comprising a plurality of resistive elements each electrically positioned between a respective electrode and the respective one of the plurality of wires.

6. (Original) A monitoring cable as recited in claim 1, wherein the cable is a substantially flat ribbon cable, the plurality of individual wires extending side by side substantially the entire length of the monitoring cable.

7. (Original) A monitoring cable as recited in claim 1, wherein the cable is substantially circular in cross section.

8. (Original) A monitoring cable as recited in claim 1, wherein the plurality of individual wires are electrically insulated from each other.

9. (Previously Amended) A monitoring cable as recited in claim 1, wherein the connector comprises an interface connector provided at one end of the cable and including a plurality of contact portions each connected to a respective one of the plurality of individual wires, the interface connector provided for connecting the monitoring cable to the monitoring equipment.

10. (Currently Amended) A monitoring cable comprising:

a cable including a plurality of individual wires each extending substantially an entire length of the cable; and

a plurality of electrode connectors each electrically connected to a respective one of the

plurality of wires and positioned at various points along the cable, each of the plurality of electrode connectors being electrically isolated from each of the other of the plurality of electrode connectors.

11. (Original) A monitoring cable as recited in claim 10, wherein the plurality of individual wires each comprise single strands of wire.

12. (Original) A monitoring cable as recited in claim 10, wherein the plurality of individual wires each comprise multi-strand wires.

13. (Original) A monitoring cable as recited in claim 10, wherein the plurality of electrode connectors are integrally formed in the cable.

14. (Previously Amended) A monitoring cable as recited in claim 10, further comprising a plurality of resistive elements each electrically positioned between a respective electrode connector and the respective one of the plurality of wires.

15. (Original) A monitoring cable as recited in claim 10, wherein the cable is a substantially flat ribbon cable, the plurality of wires extending side by side substantially the entire length of the monitoring cable.

16. (Original) A monitoring cable as recited in claim 10, wherein the cable is substantially circular in cross section.

17. (Original) A monitoring cable as recited in claim 10, wherein the plurality of individual wires are electrically insulated from each other.

18. (Original) A monitoring cable as recited in claim 10, further comprising an interface connector provided at one end of the cable and including a plurality of contact portions each connected to a respective one of the plurality of individual wires, the interface connector provided for connecting the monitoring cable to monitoring equipment.

19. (Currently Amended) A monitoring cable comprising:

a connector for connection to a monitoring equipment;

a plurality of respective cables, each of the plurality of respective cables including plurality of individual wires each extending substantially an entire length of the respective cable, each of the plurality of individual wires of each of the plurality of respective cables having an end terminating at the connector; and

a plurality of electrodes each electrically connected to a respective one of the plurality of individual wires and positioned at various points along each of the plurality of respective cables, each of the plurality of electrodes being electrically isolated from each of the other of the plurality of electrodes.

20. (Currently Amended) A monitoring cable comprising:

a connector for connection to a monitoring equipment;

a plurality of respective cables, each of the plurality of respective cables including a plurality of individual wires each extending substantially an entire length of the respective cable, each of the plurality of individual wires of each of the plurality of respective cables having an

end terminating at the connector; and

a plurality of electrode connectors each electrically connected to a respective one of the plurality of individual wires and positioned at various points along each of the plurality of respective cables, each of the plurality of electrode connectors being electrically isolated from each of the other of the plurality of electrode connectors.

21. (Currently Amended) A monitoring cable comprising:

a cable including a plurality of individual wires each extending substantially an entire length of the cable, the cable having substantially a same shape for substantially an entire length thereof; and

a plurality of electrodes each electrically connected to a respective one of the plurality of individual wires and positioned at various points along the cable, each of the plurality of electrodes being electrically isolated from each of the other of the plurality of electrodes.

22. (Original) A monitoring cable as recited in claim 21, wherein the plurality of individual wires each comprise single strands of wire.

23. (Original) A monitoring cable as recited in claim 21, wherein the plurality of individual wires each comprise multi-strand wires.

24. (Original) A monitoring cable as recited in claim 21, wherein the plurality of electrodes are integrally formed in the cable.

25. (Previously Amended) A monitoring cable as recited in claim 21, further comprising a

plurality of resistive elements each electrically positioned between a respective electrode and the respective one of the plurality of wires.

26. (Original) A monitoring cable as recited in claim 21, wherein the cable is a substantially flat ribbon cable, the plurality of individual wires extending side by side.

27. (Original) A monitoring cable as recited in claim 21, wherein the cable is substantially circular in cross section.

28. (Original) A monitoring cable as recited in claim 21, wherein the plurality of individual wires are electrically insulated from each other.

29. (Original) A monitoring cable as recited in claim 21, further comprising an interface connector provided at one end of the cable and including a plurality of contact portions each connected to a respective one of the plurality of individual wires, the interface connector provided for connecting the monitoring cable to monitoring equipment.

Claims 30-38 (Canceled)

39. (Currently Amended) A monitoring cable comprising:

a connector for connection to a monitoring equipment;

a plurality of respective cables, each of the plurality of respective cables including plurality of individual wires, each respective cable having a shape, each respective cable having substantially a same shape for substantially an entire length thereof, each of the plurality of wires

of each of the plurality of respective cables having an end terminating at the connector; and

a plurality of electrodes each electrically connected to a respective one of the plurality of individual wires and positioned at various points along each of the plurality of respective cables, each of the plurality of electrodes being electrically isolated from each of the other of the plurality of electrodes.

40. (Currently Amended) A monitoring cable comprising:

a plurality of respective cables, each respective cable having a shape, each respective cable having substantially a same shape for substantially an entire length thereof, each of the plurality of wires of each of the plurality of respective cables having an end terminating at a connector; and

a plurality of electrode connectors each electrically connected to a respective one of the plurality of individual wires and positioned at various points along each of the plurality of respective cables, each of the plurality of electrode connectors being electrically isolated from each of the other of the plurality of electrode connectors.

41-42 (Canceled)

43. (Original) A monitoring cable as recited in claim 21, wherein the shape comprises at least one of a width and diameter of the cable.

44. (Original) A monitoring cable as recited in claim 39, wherein the shape comprises at least one of a width and diameter of the cable.

45. (Original) A monitoring cable as recited in claim 40, wherein the shape comprises at least one of a width and diameter of the cable.

46. (New) A monitoring cable as recited in claim 1, wherein each of the at least one electrodes are positioned between the first end and the distal end of the cable for placement at specific positions on a patient.

47. (New) A monitoring cable as recited in claim 10, wherein each of the at least one electrode connectors are positioned at specific points along the cable for connection to electrodes attached at specific positions on a patient.

48. (New) A monitoring cable as recited in claim 19, wherein each of the at least one of the plurality of electrodes are positioned at specific points along its respective cable for placement at specific positions on a patient.

49. (New) A monitoring cable as recited in claim 20, wherein each of the at least one of the plurality of electrode connectors are positioned at specific points along its respective cable for connection to electrodes attached at specific positions on a patient.

50. (New) A monitoring cable as recited in claim 21, wherein each of the plurality electrodes is positioned at specific points along the cable for placement at specific positions on a patient.

51. (New) A monitoring cable as recited in claim 39, wherein each of the plurality of electrodes are positioned at specific points along its respective cable for placement at specific positions on a patient.

52. (New) A monitoring cable as recited in claim 40, wherein each of the plurality of electrode connectors are positioned at specific points along its respective cable for connection to electrodes attached at specific positions on a patient